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REMARKS

The present response is intended to be fully responsive to all points of objection and/or rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application is respectfully requested.

Applicants assert that the present invention is new, non-obvious and useful. Prompt consideration and allowance of the claims is respectfully requested.

Status of Claims

Claims 1-37 are pending in the application.

Claims 1-36 have been rejected.

Claims 1, 7, 9, 12, 15-18, 20-22, 26, 28, 29, 33 and 35-36 have been amended in this submission. Applicants respectfully assert that the amendments to the claims add no new matter.

Claims 6, 11, and 30 have been cancelled without prejudice to reinclusion at a later date in a continuation or divisional application.

Claim 37 has been newly added in this submission. Applicants respectfully assert that the new claim adds no new matter.

Remarks to the Drawings

Fig. 1 has been amended to add the legend PRIOR ART. The entire drawing sheet containing each corrected drawing is enclosed for review by the Examiner.

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Remarks to the Specification

The amendments to the specification are editorial in nature and do not introduce new matter.

Drawings Rejections

The drawings have been objected to. Please note the following remarks regarding the Examiner's objections:

Regarding the Examiner's objection to Figure 1, Applicants have amended Figure 1 to include the legend PRIOR ART.

The Examiner has objected that Figures 3 and 4 fail to comply with 37 CFR 1.84(p)(4) because reference characters have been used to designate similar elements. Applicants respectfully point out that Figures 3 and 4 may refer to different embodiments of the invention, and therefore, the elements should in fact be labeled differently.

Applicants therefore respectfully request that the drawing objections be withdrawn.

CLAIM REJECTIONS

35 U.S.C. § 101 Rejections

In the Office Action, the Examiner rejected claims 33 - 36 under 35 U.S.C. § 101 because the claims are purportedly "directed to non-statutory subject matter".

Specifically, the Examiner objected that the claims define abstract data structures. Applicants respectfully disagree, but in any event have amended claim 33 to recite an "article comprising: a computer-readable medium, having stored thereon instructions." It is respectfully submitted that claim 33, and claims 34-36, which depend therefrom are therefore directed to patentable subject matter.

Accordingly, Applicants respectfully request that the rejection of claims 33 - 36 under 35 USC § 101 be withdrawn.

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35 U.S.C. § 102 Rejections

In the Office Action, the Examiner rejected claims 1 - 13, 15 - 17, 19 - 23, 26 - 30, 33, 34 and 36 under 35 U.S.C. § 102(b), as being anticipated by Ostman (US 20010046221 A1). Applicants respectfully traverse this rejection in view of the remarks that follow.

Ostman discloses:

a Rake receiver (R1) for receiving a radio signal and to a searcher (S8a, S8b) for estimating the delay profile of one or more radio links. The searcher includes means for estimating delay profiles in separate windows. . . (Abstract, emphasis added)

However, as clear from the use of a Rake receiver, the Ostman reference discloses using windows for detecting energy of the multipath components received within the windows. Specifically, Ostman discloses using windows to detect power peaks of each multipath component falling therewithin. For example, Fig. 7 clearly depicts power peaks PPK1, PPK2, PPK2 in window WW1, and power peaks PPK4 and PPK5 in window WW2. See also, para. [0037].

In contrast to the Ostman reference, the claims of the present application are directed to processing symbols using windows. For example, claim 1 recites a method of processing symbols of multipath components comprising:

detecting symbols in two or more received multipath components;

grouping symbols of the two or more received multipath components into at least first and second groups based on a delay of a desired symbol within the symbols of the two or more multipath components;

allocating a first processing window to process the desired symbol within said first group of multipath components; and

allocating a second processing window to process the desired symbol within said second group of multipath components. (emphasis added)

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Likewise, independent claims 7, 12, 22, 26 and 33 recite processing symbols, and not detecting and/or processing energy as Ostman performs with a Rake receiver. Therefore, claims 1, 7, 12, 22, 26 and 33 and claims dependent thereon are allowable over the Ostman reference, because Ostman does not disclose processing symbols, but rather, detecting power peaks in the received analog RF signal.

Similarly, and in addition to the above differences between the Ostman reference and the pending claims, Ostman does not group symbols of two or more multipath components into at least first and second groups based on a delay of a desired symbol within the two or more multipath components, as recited in claims 1, 7, 12, 22, 26 and 33.

Accordingly, the Ostman reference is not apposite to the present application, and claims 1, 7, 12, 22, 26 and 33 (and claims dependent thereon) are allowable over the art of record.

In addition to the above, the Examiner pointed to Ostman Figure 7, which discloses two receiver windows. However, the second window (WW2) is described as being "adjacent of the first window WW1." (para. [0037], emphasis added). Indeed, the windows WW1 and WW2 in Figure 7 are depicted as adjacent each other.

In contrast, however, the specification of the present application discloses that "processor 340 may place the first and second processing windows (e.g. of processing windows 333, 334, 335) so as to encompass the desired symbol (e.g. symbol "0") within group 215 and the desired symbol (e.g. symbol "0") within group 235, respectively" (Application p. 8, emphasis added). This aspect of the invention is further depicted, for example at the accompanying Fig. 2, in which windows 260 and 270 are depicted as positioned separately and independently to encompass the symbol "0" as found in the two multipath groups.

Regarding claim 5, therefore, Ostman therefore does not disclose "positioning the first and second processing windows around the desired symbol within the first group and within the second group, respectively".

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Likewise, regarding **claim 10**, Ostman does not disclose a processor "to position the first and second processing windows around the desired symbol within the first group and the second group, respectively".

Regarding **claim 12**, Ostman does not disclose "processing said desired symbol in the two or more multipath components by positioning two or more processing windows around the desired symbol within the two or more groups, respectively." Nor does Ostman disclose the subject matter of **claim 19**, "adaptively positioning the first or the second processing windows to encompass the desired symbol based on a communication system parameter".

Regarding **claim 29**, Ostman does not disclose "a processor to position the first and second processing windows of the first and second processing windows units around the desired symbol within the first group and the second group, respectively."

Finally, regarding **claim 37**, Ostman does not disclose "positioning two or more processing windows around the desired symbol within the two or more groups, respectively so as to encompass said desired symbols within said processing windows".

Based at least on the above, Applicants respectfully request reconsideration and withdrawal of the rejections of claims 1 - 13, 15 - 17, 19 - 23, 26 - 30, 33, 34 and 36.

35 U.S.C. § 103 Rejections

In the Office Action, the Examiner rejected claims 14, 24, 31 and 35 under 35 U.S.C. § 103(a), as being unpatentable over Ostman as applied to claims 12, 22, 28 and 33 above, and further in view of Poor ("Probability of Error in MMSE Multiuser Detection", IEE Trans. Information Theory, vol. IT-43, No. 3, pp. 858 871, May 1997).

Applicants respectfully traverse the rejection of claims 14, 24, 31 and 35 for the reasons stated above. The Poor reference does not remedy the above deficiencies of Ostman.

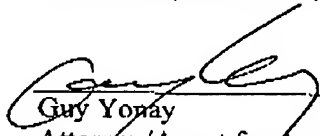
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In view of the foregoing amendments and remarks, the pending claims are deemed to be allowable. Their favorable reconsideration and allowance is respectfully requested.

Should the Examiner have any question or comment as to the form, content or entry of this Amendment, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

Please charge any fees associated with this paper to deposit account No. 50-3355.

Respectfully submitted,


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